

SHURA-BURA, B.L.; VOROB'YEV, M.I.; SHLYKOV, V.I.

Disinfection of dishes and linen by means of electrolyzed sodium  
chloride solutions. Zhur.mikrobiol., epid.i immun. 33 no.8:9-14  
Ag '62. (MIRA 15:10)

1. Iz kafedry obshchey i voyennoy epidemiologii Voenno-  
meditsinskoy ordena Lenina akademii imeni Kirova.  
(DISINFECTION AND DISINFECTANTS) (BEDDING--DISINFECTION)  
(TABLEWARE--DISINFECTION) (SODIUM CHLORIDE)

KISLIK, V.A.; SHLYKOV, V.I.

Machine for testing specimens for wear with a reciprocating motion.  
Izv. vys. ucheb. zav.; neft' i gaz 4 no.12:109-112 '61.  
(MIRA 16:12)

1. Rostovskiy institut inzhenerov zheleznodorozhnogo transporta  
i Groznenskiy neftyanoy institut.

SHLYKOV, V.I.

Testing the wear resistance of magnesium cast iron in order to  
use it for manufacturing drilling equipment parts subject to  
wear. Izv.vys.ucheb.zav.; neft' i gaz 5 no.4:99-104 '62  
(MIRA 16:1)

1. Groznenskiy neftyanoy institut.  
(Oil well drilling--Equipment and supplies)  
(Cast iron--Testing)

SHLYKOV, V.I.

Nature of the abrasive wear of drilling-equipment parts made  
of magnesium cast iron. Izv. vys. shk. ziv.; nef't' i gaz. 6  
no. 5:103-107 '63 (MIRA 17:7)

1. Groznenskiy nef'tyanoy institut.

SHLYKOV, V.I.; MKRTYCHAN, Ya.S.; POZHARNOV, G.M.

Efficient design of the lightened cylinder bush of a drill  
pump. Neft.khoz. 41 no. 1:66-68 Ja '63. (MIRA 17:7)

SHLYKOV, V.I.

Pistons of drilling pumps for deep well drilling. Izv. vys.  
 ser.; noit' 1 gaz 7 no.6-84 '84. (MIRA 17:9)

1. Gvozdenyiy neflyannyi institut.

GRACHEV, K.V.; SHLYKOV, V.I.

Restoring the joints of drill pipes by build-up welding with a  
weaving arc. Mash. i neft. obor. no.1:25-28 '65. (MIRA 18:4)

1. Groznenskiy neftyanoy institut.

SHLYKOV, V.K.

MALINOV, M.S., inzhener; SHLYKOV, V.K. inzhener.

Increasing adhesion weight on passenger locomotives of type  
24-2. Vest.TSNII MPS no.2:56-58 Mr '57. (MLRA 10:4)  
(Locomotives)



L 2204-66 ENT(d)/ENT(m)/ENP(w)/ENP(v)/T/ENP(t)/ENP(k)/ENP(h)/ENP(l)

ACC NR: AP6011270 JD/HM/EM/DJ

SOURCE CODE: UR/0413/66/000/006/0125/0125

INVENTOR: Shlykov, V. P.; Manuylova, O. M.

ORG: none

TITLE: Furnace for brazing honeycomb panels. Class 49, No. 180073

SOURCE: <sup>44,55,18</sup> Izobreteniya, <sup>26,55</sup> promyshlennyye obraztzy, tovarnyye znaki, no. 6, 1966, 125

TOPIC TAGS: brazing, honeycomb panel, honeycomb panel brazing, brazing furnace

ABSTRACT: This Author Certificate introduces a furnace for brazing honeycomb panels (see Fig. 1). It consists of a shielding gas chamber, an upper and lower base, a bottom plate on which the panels are placed, and a set of quartz lamps. To provide for adequate clamping and to prevent distortion of the panels, the upper base of the unit is equipped with heat-resistant strips made of metal whose linear expansion

Card 1/2

UDC: 621.791.364.039

L 23304-66

ACC NR: AP6011270

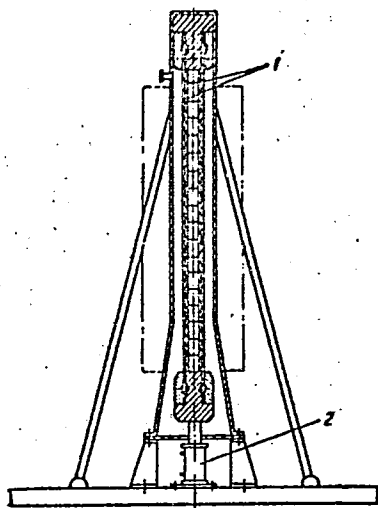


Fig. 1. Furnace for brazing honeycomb panels

- 1 - Heat-resistant strips;
- 2 - hydraulic cylinders.

coefficient is lower than that of the brazed panels, while the lower base has hydraulic cylinders with rams connected to the other ends of the strips. Orig. art. has 1 figure. [ND]

SUB CODE: 13/ SUBM DATE: 18Mar64/ ATD PRESS: 4230

Card 2/2 ✓

SHLYKOV, V.V.

Reducing the time consumption in flask production. Lit. proizv.  
no.11:43 N '64. (MIRA 18:8)

SHLYKOV, V<sup>Y</sup>E

USSR/Miscellaneous - Foundry processes

**Card** 1/1 : Pub. 61 - 20/23

**Authors** : Shlykov, V. E.

**Title** : Moulding with spacing gate-pin

**Periodical** : Lit. proizv. 3, page 31, May - June 1954

**Abstract** : The advantages derived from employing spacing gate-pin moulding, are briefly described. Drawings.

**Institution** : ...

**Submitted** : ...

GORYUSHINA, V.A., inzh.-tekhnolog; SHLYKOV, Yu.A., arkhitektor

Several problems relating to the architectural planning and  
equipment of surgical wards. Khirurgiia 39 no.12:107-113  
D '63 (MIRA 18:1)

1. Iz Nauchno issledovatel'skogo instituta obshchestvennykh  
zdanii Akademii stroitel'stva i arkhitektury SSSR (direktor -  
kand. arkhitektury G.A. Gradov) i kliniki gosspital'noy khirur-  
gii (direktor - deystvitel'nyy chlen AMN SSSR prof. B.V.  
Petrovskiy) I Moskovskogo ordena Lenina meditsinskogo insti-  
tuta imeni I.M. Sechenova.

SHLYKOV, Yu. P.

FILIPPOV, V.V., kandidat tekhnicheskikh nauk; YEVENKO, V.I., kandidat tekhnicheskikh nauk; SHLYKOV, Yu.P., kandidat tekhnicheskikh nauk, redaktor; BLIZNYANSKIY, A.S., inzhener, redaktor; KUTSENKO, S.M., kandidat tekhnicheskikh nauk, retsenzent; UVAROVA, A.F., tekhnicheskii redaktor

[Intake and outlet processes in steam engines] Protsessy vpuska i vypuska v parovykh mashinakh. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroitel'noi lit-ry, 1955. 213 p., 11 nomograms  
(Steam engines) (MLRA 9:3)

STERMAN, Lev Samoylovich, kandidat tekhnicheskikh nauk; STYUSHIN, N.G.  
retsensent, kandidat tekhnicheskikh nauk; SHLYKOV, Yu.P.  
redaktor, kandidat tekhnicheskikh nauk; ~~MODEL', B.I.~~  
tekhnicheskiiy redaktor

[Evaporators] Ispariteli. Moskva, Gos. nauchno-tekhn. izd-vo  
mashinostroit. lit-ry, 1956. 67 p. (MLRA 10:5)  
(Evaporating appliances)

SHLYKOV, YU. P.

PHASE I BOOK EXPLOITATION

368

Kutateladze, Samson Semenovich

Osnovy teorii teploobmena (Fundamentals of Heat Exchange Theory)  
Moscow, Mashgiz, 1957. 382 p. 5,000 copies printed.

Reviewer: Shlykov, Yu.P., Candidate of Technical Sciences;  
Ed.: Deshkin, V.N., Doctor of Technical Sciences, Professor; Ed.  
of Publishing House: Gofman, Ye.K.; Tech. Ed.: Pol'skaya, R.G.

PURPOSE: This book is intended for scientists, engineers and  
physicists and may also be used by students specializing in  
physical thermotechnics.

COVERAGE: The book presents the physics of heat exchange phenomena  
and provides the fundamental mathematical expressions for the  
theory of heat propagation. The most important practical appli-  
cation of the mathematical principles and an analysis of exper-  
imental data are given. There are 135 references, of which 112  
are Soviet, 14 English, 8 German, 1 French.

Card ~~1/22~~



SHLYKOV, Yu. P.

SHEBALIN, Yu. A., inzhener; SHLYKOV, Yu. P., kandidat tekhnicheskikh nauk.

Problems of designing steam power installations of small capacity.  
Teploenergetika 4 no.3:37-41 Mr '57. (MLRA 10:3)

1. Nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.  
(Steam power plants)

BERMAN, L. V. prof., doktor tekhn.nauk; KOSTERIN, S.I., prof., doktor tekhn.  
nauk, retsenzent; SHLYKOV, Yu.P., kand.tekhn.nauk, red.;  
UVAROVA, A.F., tekhn.red.

[Heat exchangers and condensation devices for turbine units]  
Teploobmennye apparaty i kondensatsionnye ustroistva turbo-  
ustanovok. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.  
lit-ry, 1959. 427 p. (MIRA 12:10)

1. Bryanskiy institut transportnogo mashinostroyeniya (for  
Berman).

(Heat exchangers)

(Condensers (Steam))

BUGAKOV, P.I.; UDALOV, V.S.; SHLYKOV, Yu.P.

[Investigating the heat conductivity of a packing of shot  
in various gaseous media] Issledovanie teploprovodnosti  
zasypki iz drobi v razlichnykh gazovykh sredakh. [n.p.]  
Gos. kom-t po ispol'zovaniyu atomnoi energii, 1960. 14 p.  
(MIRA 17:1)

(Shot--Thermal properties) (Heat--Conduction)

GANIN, Ye.A.; FLORINSKIY, B.V.; SHLYKOV, Yu.P.

[Theoretical and experimental study of contact heat transfer] Teoreticheskoe i eksperimental'noe issledovanie kontaktnogo teploobmena. Moskva, Gos.kom-t po ispol'zovaniyu atomnoi energii, 1960. 53 p.  
(MIRA 17:2)

SHLYKOV, Yu.P., kand.tekhn.nauk; GANIN, Ye.A., inzh.; DEMKIN, N.B., inzh.

Investigation of contact heat exchange. Teploenergetika 7 no.6:  
72-76 Je '60. (MIRA 13:8)

(Heat--Transmission)

24.5200

77248  
SOV/89-8-2-13/30

AUTHOR: Shlykov, Yu. P.

TITLE: Experimental Study of Heat Transfer in Narrow Flat Channels Under High Heat Load. Letter to the Editor

PERIODICAL: Atomnaya energiya, 1969, Vol 8, Nr 1, pp 144-145 (USSR)

ABSTRACT: Although in nuclear reactors heat loads may reach  $5 \times 10^7$  kcal/m<sup>2</sup>·h or more, and narrow flat or annular tubes are in wide use, the author did not find in the literature reliable enough experiments on the basis of which one could decide which of the many theoretical expressions best represents the actual situation. The author used a low-voltage current to heat directly the working section of the water-cooled channel (rated 1 MW DWT). The experimental setup is shown in Fig. .

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Experimental Study of Heat Transfer in  
Narrow Flat Channels Under High Heat Load.  
Letter to the Editor

77/48  
SON/89-8-13/30

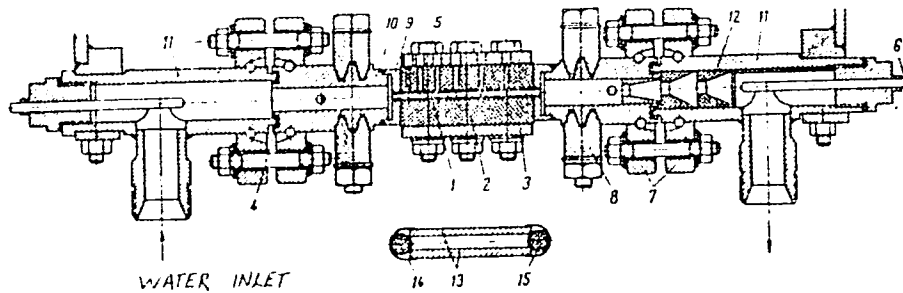


Fig. 2. Experimental setup and cross section of the working tube: (1) working tube; (2) electroheating insulating cover plates; (3) relieving layers; (4) electroinsulating washers; (5) tie belts; (6) thermocouple housing; (7) electroinsulating flanges; (8) current bar; (9) contacts; (10) current carrying bushing; (11) input and output chambers; (12) mixing arrangement; (13) calibrated plates; (14) steel foil; (15) spacers.

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Experimental Study of Heat Transfer in  
Narrow Flat Channels Under High Heat Load.  
Letter to the Editor

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The narrow channels were made out of flattened tubing. A series of experiments were performed on the section shown in Fig. 2. The flow of water was varied from 5 to 12 m/sec, heat load from  $3.6$  to  $5.7 \cdot 10^6$  kcal/ $m^2 \cdot h$ . The input water temperature varied between 45 and  $80^\circ$  C. Pressure in the contour was 50 atm. Of the 65 experiments on nonboiling water, 35 were done in a  $1 \times 13$  mm channel and the rest in a  $1.5 \times 23$  mm channel. The length of the working section was 200 mm. Since many results were identical, computations were done on the basis of 17 measurements. The author tested the following equations:

$$Nu_{cr} = 0.023 Re_{cr}^{0.8} Pr_{cr}^{0.4} \left( \frac{\mu_{cr}}{\mu_{cr}} \right)^{0.14} \quad (1)$$

--equation by Zider and Bell;

$$Nu_{2k} = 0.023 Re_{2k}^{0.8} Pr_{2k}^{0.4} \left( \frac{\mu_{2k}}{\mu_{cr}} \right)^{0.14} \quad (2)$$

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Experimental Study of Heat Transfer in  
Narrow Flat Channels Under High Heat Load.  
Letter to the Editor

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--same equation but with coefficients corrected by  
Carpenter and others (see reference) for narrow  
aperture;

$$Nu_{zh} = 0.023 Re_{zh}^{0.8} Pr_{zh}^{0.4} \quad (3)$$

--equation by McAdams for a circular tube;

$$Nu_{zh} = 0.021 Re_{zh}^{0.8} Pr_{zh}^{0.43} \left( \frac{Pr_{zh}}{Pr_{cr}} \right)^{0.12} \quad (4)$$

--universal equation by Mikheyev;

$$Nu_{zh} = 0.0274 Re_{zh}^{0.8} Pr_{zh}^{0.36} \left( \frac{Pr_{zh}}{Pr_{cr}} \right)^{0.11} \quad (5)$$

--equation by Yakovlev (Atomnaya energiya, 11, Nr 2,  
179 (1957)) for a circular tube. The processing of  
the average (over the channel length) of the heat  
transfer coefficients is shown in Figs. 3 and 4  
in the form:

$$Nu_{zh} = f(Re_{zh})$$

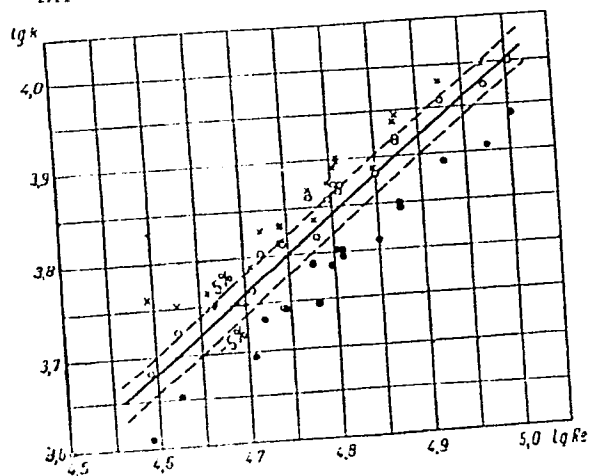
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Experimental Study of Heat Transfer in  
Narrow Flat Channels Under High Heat Load.  
Letter to the Editor

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SOV/89-8-2-13/30

where  $A_1$  are right-hand sides of Equations (1) to (5)  
without the factor  $Re_{ch}^{0.8}$ .

Fig. 3. Relationship  
 $k = f(Re_{ch})$  using Equations:  
(1)  $\bullet$ ; (2)  $\circ$ ; (3)  $\times$ .

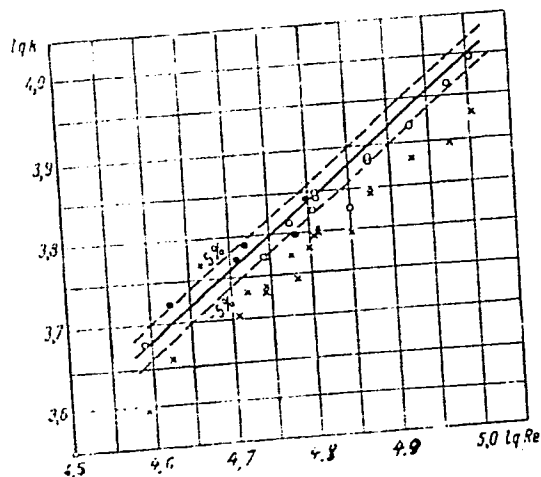


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Experimental Study of Heat Transfer in  
Narrow Flat Channels Under High Heat Load.  
Letter to the Editor

77248  
30V/89-8-2-13/30

Fig. 4. Relationship  
 $k = f(Re_{ch})$ : • and ○,  
using Eq. (4) for the  
channel with gaps of 1  
and 1.5 mm, respectively;  
x, using Eq. (5).



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Experimental Study of Heat Transfer in  
Narrow Flat Channels Under High Heat Load.  
Letter to the Editor

77248  
SOV/89-8-2-13/30

For the defining gage the author used in all cases  
the equivalent diameter  $d_E = \frac{4F}{\pi}$  (F is the area of the  
cross section of the channel,  $\pi$  is the wetted parameter).  
The results can be generalized most easily (with a  $\pm 5\%$   
dispersion) using Eq. (4) which was verified for  
 $4 \cdot 10^4 \leq R_{zh} \leq 10^5$ , heat load up to  $5.7 \cdot 10^6$  kcal/m<sup>2</sup>.h  
and  $1.8 \leq \frac{Pr_{zh}}{Pr_{ct}} \leq 3$ . Z. P. Medvedev and A. I. Yevstaf'yeva

helped during the experiments. There are 4 figures; and  
5 references, 3 Soviet, 2 U.S. The U.S. references are:  
W. McAdams, W. Kennel, J. Addoms, Trans. ASME, 72, Nr 4,  
421 (1950); F. Carpenter, A. Colburn, E. Schoenborn, A.  
Wurster, Trans. AIChE, 42, 165 (1946).

SUBMITTED:

May 21, 1959

Card 7/7

SHLYKOV, Yu.P.; GANIN, Ye.A.

Thermal resistance of a contact. Atom. energ. 9 no.6:496-498 D  
'60. (MIRA 13:12)  
(Heat--Transmission) (Surfaces (Technology))

26.2/81  
AUTHORS: S/096/60/000/010/014/022  
E194/E135  
Petukhov, B.S., Shlykov, Yu. P., Kurayeva, I.V.,  
Kazakova, Ye.D., and Prozorov, V.K.

TITLE: Calculation of Transient Temperature Fields in  
Multi-Layer Walls with Internal Heat Evolution by  
the Hydrothermal Analogy Method

PERIODICAL: Teploenergetika, 1960, No 10, p 95

TEXT: The temperature distribution is calculated in two  
and three layer walls with internal sources of heat, required  
to determine the temperature gradients during calculation of  
the strength of assemblies in several types of heat exchange  
equipment. 21

ASSOCIATION: Moskovskiy energeticheskiy institut  
(Moscow Power Institute)

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23557  
S/096/61/000/007/005/006  
E194/E155

11.9100  
AUTHORS: Shlykov, Yu.P., Candidate of Technical Sciences, and  
Ganin, Ye.A., Engineer

TITLE: An experimental investigation of contact heat-exchange

PERIODICAL: Teploenergetika, 1961, No.7, pp. 73-76

TEXT: A previous article in Teploenergetika No.6, 1960 (Ref.1) considered a theoretical method of calculating the thermal resistance of contact between two rough surfaces and recommended certain formulae for calculations. In order to check the method a series of tests were made to determine the thermal resistance of joints as a function of the compressive force, the degree of surface finish, the kind of material, the pressure and nature of the gas used, and the temperature of the contacting surfaces. Cylindrical test pieces were used, 30 mm in diameter and 34 mm long. The test chamber is illustrated diagrammatically in Fig.2. The heat flow was set up by a heater (1) and a cooler (2). The compression between the specimens could be up to 3000 kg and was recorded by a spring dynamometer (4); the test piece is shown at (5). Gas atmosphere or vacuum could be used. The pressure between the  
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23557

S/096/61/000/007/005/006  
E194/E155

An experimental investigation of contact heat-exchange specimens was raised from 0 to 200 kg/cm<sup>2</sup> in steps of 50 kg/cm<sup>2</sup>. The test results were obtained in the form of temperatures measured over the length of the specimens. The heat drop in the contact zone was determined by extrapolation, and ranged from 10 to 8 °C. The error of the test results was on average 10-12% but at low rates of heat flow it reached 20%. The tests were made on samples of steel 3, stainless steel 1X18H9T (1Kh18N9T), Dural D-16 (D-16), and copper M-2 (M-2). The test results are plotted in Figs. 3, 4 and 5. In Fig.3 the material is steel 1Kh18N9T with class 5 finish; curve 1 shows the total thermal resistance of contact, curve 2 the thermal resistance of the actual contact (pressure of  $5 \times 10^{-3}$  mm Hg), curve 3 the thermal resistance of the air layer, and curve 4 the thermal resistance of the contact in helium gas. Fig.4 corresponds to Dural D-16 with class 4 finish, where curve 1 corresponds to the total thermal resistance and curve 2 to the thermal resistance of the actual contact (at a pressure of  $5 \times 10^{-3}$  mm Hg). Fig.5 corresponds to steel 3 with class 8 surface finish. The total thermal resistance of the

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S/096/61/000/007/005/006  
E194/E155

An experimental investigation of contact heat-exchange

contact alone is shown. It will be seen that the thermal resistance drops as the pressure is increased, rapidly at first and then more slowly. The dotted lines correspond to theoretical values of thermal resistance obtained by the formula given in the previous article. Agreement is generally good and in the case of Dural the theoretical and experimental curves coincide. As it is important to be able to separate the various components of thermal resistance, tests were made both under vacuum and in a helium atmosphere. The fact that curves 1 and 2 in Fig.4 for Dural are so close indicates that in this case the conductivity of the actual contact plays the main part in heat transmission. The corresponding curves for the steel 1Kh18N9T, which is of lower thermal conductivity (see Fig.5), show that in this case conductivity through the gas is important. Tests were made with helium because of its high thermal conductivity and it is claimed that in this case the main flow of heat through the contact zone passes through the gas. Thus the main conclusion is that in relatively soft materials of good thermal conductivity heat flows

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23557  
S/096/61/000/007/005/006  
E194/E155

An experimental investigation of contact heat-exchange through the contact, and in hard materials of poorer conductivity heat conduction through the gas plays a considerable part. There are 8 figures, 1 table and 4 Soviet references.

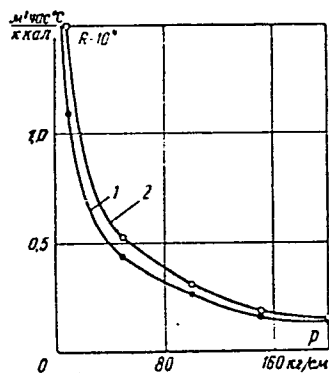


Fig. 4

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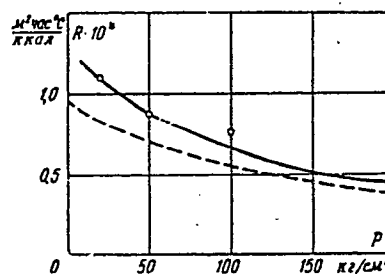


Рис. 5. Материал — Ст. 3, 8-й класс чистоты. Общее термическое сопротивление контакта.

Fig. 5

SHLYKOV, Yu.P., kand.tekhn.nauk; UDALOV, V.S., inzh.

Heat conductance of a shot filling in different gaseous mediums.  
Teploenergetika 8 no.4:73-76 Ap '61. (MIRA 14:8)  
(Heat--Transmission)  
(Insulation (Heat))

SHLYKOV, Yuriy Pavlovich; GANIN, Yevgeniy Alekseyevich. Prinimala  
uchastiye MIKHAYLOVA, G.M., kand. tekhn. nauk;  
VOSKRESENSKIY, K.D., red.; FRIDKIN, L.M., tekhn. red.

[Heat exchange by contact; heat transfer between contiguous  
metal surfaces] Kontaktnyi teploobmen; teploperedacha  
mezhdú soprikasaiushchimsia metallicheskimí poverkhnostiami.  
Moskva, Gosenergoizdat, 1963. 143 p. (MIRA 16:5)  
(Heat--Transmission)

L 10760-63 EWP(j)/EPF(c)/EWT(1)/EPF(n)-2/EWT(m)/BDS--AFFTC/ASD/  
SSD--Pc-4/Pr-4/Pu-4--RM/WW

ACCESSION NR: AP3003986

S/0089/63/015/001/0077/0079

AUTHOR: Karavayev, G. N.; Leongardt, A. D.; Shly\*kov, Yu. P. 73

TITLE: Study of critical <sup>2</sup>heat flux in forced flow of monoisopropylbiphenyl  
at a temperature below saturation 7

SOURCE: Atomnaya energiya, v. 15, no. 1, 1963, 77-79

TOPIC TAGS: burnout heat flux, monoisopropylbiphenyl, nuclear reactor coolant

ABSTRACT: The burnout heat flux of subcooled monoisopropylbiphenyl was studied experimentally in a closed-circulation loop at flow velocities of 4.24 and 6.27 m/sec and subcooling temperatures from 120 to 195C. The test section (Fig. 1 of Enclosure) consisted of an electrically heated test element (plates 6 and 8 mm wide, 0.2 mm thick, and 125 mm long) inserted into the ceramic tube through which the coolant was passed. In most of the test runs the burnout flux was achieved by slowly increasing the electric power input

Card 1/A2

L 10760-63

ACCESSION NR: AP3003986

while maintaining constant pressure, temperature, and velocity of the coolant. The burnout of the plate (corresponding to the burnout flux) was detected instrumentally. The critical heat load was varied 1) from  $3.7 \times 10^6$  to  $4.8 \times 10^6$  kcal/m<sup>2</sup>·hr at a flow velocity of 6.3 m/sec and subcooling temperature from 124 to 190C and 2) from  $2.7 \times 10^6$  to  $3.6 \times 10^6$  kcal/m<sup>2</sup>·hr at a flow velocity of 4.24 m/sec and subcooling temperatures from 120 to 195C. The error in determining the critical heat load amounted to 4.5%. The results obtained are shown in Fig. 2 of Enclosure. It is concluded that for monoisopropylbiphenyl the burnout heat flux, like that for other fluids, varies linearly with respect to subcooling. The close distribution of the data points corresponding to pressure variations from 3 to 6 atm with respect to the straight line indicates that the effect of pressure (in the range studied) on burnout flux is weak. The experimental data did not agree with several criterial relationships proposed by others for determining burnout flux. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 23Oct62

DATE ACQ: 08Aug63

ENCL: 02

SUB CODE: 00

NO REF SOV: 003

OTHER: 000

Card - 2/12

ACCESSION NO: AP4012342

S/0096/64/000/002/0078/0081

AUTHORS: Shly\*kov, Yu. P. (Candidate of technical sciences); Abramov, A. I. (Engineer); Leongardt, A. D. (Engineer); Mikhaylov, V. D. (Engineer)

TITLE: Critical thermal load in forced monoisopropyldiphenyl flow in tubes and channels

SOURCE: Teploenergetika, no.2 , 1964, 78-81

TOPIC TAGS: monoisopropyldiphenyl, forced flow, critical thermal load, underheat, saturation temperature

ABSTRACT: An experimental investigation has been made of critical thermal loads in monoisopropyldiphenyl (MIPD) forced flow on a flat plate and in a tube under large flow and temperature variations. The flow analyses were conducted in a closed circuit system with all structural components, in contact with MIPD, made from 1Kh18N9T steel. Pressure measurements were made by a differential manometer type DSE-9A and a secondary instrument DSPI-02. Heating was accomplished electrically, and the thermocouple measurements were recorded on EPP-09 potentiometer. The critical thermal load for the plates varied from  $3.7 \times 10^6$  to  $4.8 \times 10^6$  kcal/m<sup>2</sup> hr

Card 1/2

ACCESSION NO: AP4012342

at speeds of 6.3 m/sec and 4.2 m/sec, underheat temperature variation range from 120 to 195C, and pressures of 3 to 6 atm. It is shown that the critical thermal flow varies linearly with the underheat temperature. A similar study in a 10-mm by 150-mm tube yields the same result up to 100C, after which the slope of linear growth of critical heat flow versus temperature decreases by about 20%. The experimental results indicate that forced flow of MIPD attains large critical thermal flow values before reaching saturation temperatures. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: AI

NO REF SOV: 006

OTHER: 001

Card 2/ 2



SHLYKOV, Yu. P.; TSAREVSKIY-DYAKIN, S. N.; DOSTOV, A. I.

"The efficiency of finned surfaces."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12  
May 1964.

Inst of Theoretical & Experimental Physics.

SHLYKOV Yu.P., kand.tekhn.nauk

Calculation of the thermal resistance of the contact of finished  
metal surfaces. Teploenergetika 12 no.10:79-83 0 '65.

(MIRA 18:10)

1. Institut teoreticheskoy i eksperimental'noy fiziki.

ACC NR: AP0036434

(N)

SOURCE CODE: UR/0096/66/000/012/0062/0066

AUTHOR: Shlykov, Yu. P. (Doctor of Technical Sciences); Tsaravskiy-Dyakin, S. N.  
(Dissertant; Engineer)

ORG: none

TITLE: Turbulent flow and heat exchange in smooth rectilinear channels of arbitrary cross section

SOURCE: Teploenergetika, no. 12, 1966, 62-66

TOPIC TAGS: turbulent flow, heat transfer, hydraulic resistance

ABSTRACT: An approximate method of calculation is proposed for determining the hydraulic resistance and heat exchange in channels of intricate shape. It is based on principles of turbulent transfer in round tubes and is applied to the turbulent flow of an incompressible fluid in a cylindrical channel of arbitrary cross section. It was checked by comparing calculated and experimental resistance coefficients of channels of various cross sections over a wide range of Reynolds numbers, and a good agreement was obtained in all cases. The method also permits one to find an expression for the tangential stresses on the wall. The method is applicable to the calculation of heat transfer to ordinary fluids ( $Pr \geq 1$ ) in the range of thermal stabilization. In order

Card 1/2

UDC: 621.1.016.4

ACC NR: AP6036434

to carry out all the calculations, it is sufficient to have the solution of Poisson's equation for the given range (shape of the channel cross section). Orig. art. has: 6 figures, 1 table and 24 formulas.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 004

Card 2/2

CHUMAKOV, M.P.; FRADKIN, M.Ya.; SHLYKOVA, B.D.; AVAKYAN A.A.; ZAITSEVA N.S.

New method for trachoma control; therapy with chloromycetin  
L and synthomycin. Vest. oft., Moskva 30 no.3:3-9 May-June 51.  
(CINL 21:1)

1. Of the State Scientific-Research Institute for Eye  
Diseases imeni Gel'mgol'ts and of the Institute of Viru-  
sology imeni Ivanovskiy of the Academy of Medical Sciences  
USSR.

SHLYKOVA, B. D.  
EXCERPTA MEDICA SEC. 12 Vol. 12/8 Ophth. Aug. 58

1354. A COMPARATIVE ASSESSMENT OF THE VARIOUS METHODS OF TREATMENT OF INTRACTABLE AND LONGSTANDING TRACHOMA WITH THE NEWEST SOVIET ANTIBIOTICS (Russian text) - Shlykova B. D. - SBORN. INFORM. -METOD. MATERIAL. INST. 1956, 4 (111-113)

The treatment of patients with intractable forms of trachoma was carried out with a combination of synthomycin (chloramphenicol), biomycin (chlortetracycline) and terramycin. The best results were obtained by the use of parenteral synthomycin, the application of a 1% emulsion of this drug to the affected areas of the mucosa, and subconjunctival injection of a 0.3% solution. At the end of a 4-5.5 weeks' course of treatment, a change to stage IV was obtained in 51.5% of patients. As a result of the internal administration of synthomycin, 3% of patients developed complications in the form of nausea, vomiting and diarrhoea. With treatment by emulsions of biomycin and terramycin, change to stage IV took place in 42% of patients after a 5- to 7-week course. Recurrence took place within a year in 7% of cases and later in isolated cases. (S)

LEONT'YEV, O.K.; FOTEYEVA, N.I.; ZAKHAROVA, L.Ya.; SHLYKOVA, L.M.

Principle stages in the history of the southern part of  
the Volga-Ural interfluvium during the recent Quaternary period.  
Nauch. dokl. vys. shkoly; geol.-geog. nauki no.3:79-89 '58.  
(MIRA 12:1)

L.Moskovskiy universitet, geograficheskiy fakul'tet, kafedra  
geomorfologii.

(Volga Valley--Geology, Stratigraphic)  
(Ural Valley--Geology, Stratigraphic)

SHLYKOVA, N., inzh.

In the Technical Council. Energ. stroi. no.27:89-90 '62.  
(MIRA 15:9)  
(Hydraulic engineering)



MAZILKIN, I.A.; SHLYKOVA, O.M.

Influence of sources of nitrogen nutrition on nitrogen metabolism  
in cells of *Bac.megatherium*. *Izv. Sib. otd. AN SSSR* no.3:98-104  
'59. (MIRA 12:8)

1. Bashkirskiy filial Akademii nauk SSSR.  
(Nitrogen metabolism) (*Bacillus megatherium*)

KUZIN, A.M.; BEREZINA, N.M.; SHLYKOVA, O.N.

Role of the dose rate in radiobiological effects on plants.  
Biofizika 5 no. 5:566-569 '60. (MIRA 13:10)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.  
(PLANTS, EFFECT OF GAMMA RAYS ON) (RADIATION--DOSAGE)

LUCHITSKIY, I.V., red.; BOGOLEPOV, K.V., red.; KOSYGIN, Yu.A., red.; MUSAIOV, D.I., red.; SHLYKOVA, O.P., red.; YUNOV, A.Yu., red.; BUSHUYEVA, V.M., red.; VYALYKH, V.I., tekhn. red.

[Tectonics of Siberia] Tektonika Sibiri. Novosibirsk. Vol.2. [Tectonics of Krasnoyarsk Territory] Tektonika Krasnoyarskogo kraia. 1963. 385 p. (MIRA 17:4)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye.

SHLYKOVA, S. A. Cand Tech Sci -- (diss) "Development of traction- and heat-engineering tests for locomotives." Mos, 1957. 16 pp 20 cm (Acad Sci USSR. Inst of History of Natural Science and Engineering), 110 copies (KL, 24-57, 119)

-56-

SHLYKOVA, S.A.

First experimental investigations of locomotives ( up to the  
middle of the 19th century. Vop.ist.est. i tekhn. no.5:187-190  
'57. (MIRA 11:2)

(Locomotives--Testing)

YEREMEYEVA, S.I.; YAKOVLEV, V.B.; CHESNOVA, L.V.; SHLYKOVA, S.A.; KOZLOV, S.G.;  
KHRENOV, K.K. (Kiyev); TIGRANYAN, S.T. (Yerevan); KROTIKOV, V.A. (Leningrad)

In the Soviet National Association of Historians of Science and  
Technology. Vop.ist.est.i tekhn. no.10:180-187 '60. (MIRA 14:3)  
(Scientific societies)

AUTHOR SULTANAYEV, A.A., SHLYKOVA, T.I. 20-6-42/59  
 TITLE The Eostaffella facial complex in the Carbonaceous.  
 (Eoshtaffellovyy fatsial'nyy kompleks v karbone.- Russian)  
 PERIODICAL Doklady Akademii Nauk SSSR 1957, Vol 113, Nr 6, pp 1334-1337  
 (U.S.S.R.)  
 ABSTRACT In the carbonaceous deposits (from the Taurus horizon of the  
 Visé stage up to the Kashir horizon of the Moscow stage) often  
 a peculiar foraminifera complex is well developed in the mud,  
 in organogenic mud, and often in algae limestones. Various  
 eostaffella as well as archaedisoides predominate here. Often  
 bradyiines occur. Endothyres as well as globivalvulines are  
 often present. Some typical Visé forms, however, as well as some  
 middle carbonaceous genera lack. Some scientists are inclined  
 to attach a stratigraphic importance to this complex. They class  
 its deposits among the basis of the Bashkir stage, as "strata  
 of Krasnaya Polyana" and parallelize them with the suite C<sub>5</sub> of  
 the Denotes basin and with the upper parts of the suite  
 C<sub>4</sub>. The authors were able to make themselves conversant, accord-  
 ing to some profiles, with the distribution of this foraminifera  
 complex in the carbonaceous of the Russian Plateau and of the  
 Ural. On this occasion it turned out that in the eostaffella

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20-6-42/59

The Eostaffella facial complex in the Carbonaceous.

APPROVED FOR RELEASE: 08/23/2000 complex sometimes the archaedisoides, in other cases the  
 bradyiines, or, rarely, both are lacking. CIA-RDP86-00513R001549720016-6

1. South Ural, Uvel'ka river, 70 km south-south-west of Chelyabinsk. Algae, more rarely organogenic - clastic limestones, total thickness 200 m. Many foraminifera. Age not older than the Mikhaylov and hardly younger than the Venev horizon. The 130 m thick limestones lying on it are very similar and also contain numerous foraminifera.
2. Another profile of equal plasticity is on the Iset river above the town of Kamensk on the east slopes of the middle Ural. It is very similar to that of Uvelka. The "Krasnaya-Polyana"-complex here has an age Serpukhov and Namur. The foraminifera are extremely rich and manifold.
3. In the Shartym-profile the "Krasnaya-Polyana"-complex is of the Bashkir age and corresponds to a part of the V.horizon of Librovich.
4. The "Krasnaya-Polyana"-complex is less extended on the western slopes of the Ural. On the strength of the presence of choristites and foraminifera which characterize the mentioned strata, Eynor counts this profile as belonging to the Bashkir stage.
5. On the Russian Plateau the "Krasnaya-Polyana"-complex apparently is of the Namur- and middle carbonaceous age.

CARD 2/3

ACC NR: AP6023002

SOURCE CODE: UR/0185/66/011/004/0437/0438

AUTHOR: Samsonov, H. V.; Shlyuko, V. Ya.

ORG: Institute of Problems in the Science of Materials AN UkrSSR, Kiev (Instytut problem materialoznavstva AN UkrSSR)

TITLE: Thermionic emission properties of rare earth borides

SOURCE: Ukrayins'kyi fizichnyi zhurnal, v. 11, no. 4, 1966, 437-438

TOPIC TAGS: rare earth metal, boride, scandium compound, yttrium compound, lanthanide series, work function, electron transition, electron emission, electron shell

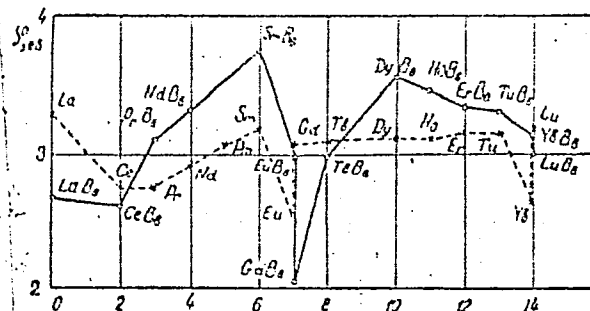
ABSTRACT: Rare earth borides of Sc, Y and most lanthanides have good thermionic emission properties and low work functions which makes it possible to use them as cathode materials. The work function of rare earth hexaborides is assumed to be determined by donor-acceptor interaction between the atoms of the metal and boron on the basis of the number of possible rare earth element terms and the possibility of  $f \rightarrow b$  electron transitions. The authors feel that a more accurate interpretation of the rare earth hexaboride work function may be made on the basis of the theory of electron configuration stability where the electrons are produced in the  $d-f$  shells of the transition metal atoms. The production of the three most stable electron configurations ( $f^0$ ,  $f^7$  and  $f^{14}$ ) in the  $f$ -states of the electron shell is studied. In studying the first group of

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ACC NR: AP6023002

lanthanides where atoms in an isolated state have 7 or less electrons in the  $f$ -shell, it may be assumed that the statistic weight of the  $f^7$ -states increases with the number of electrons in the  $f$ -shell. Since  $s$ -electrons take part in emission with partial transition to the  $f$ -level, increasing the statistic weight of the  $f^7$ -configurations, the work function of the metals grows uniformly with an increase in the number of electrons in the  $f$ -shell up to six. Thus the work function increases with the statistic weight of the stable  $f^7$ -configurations in the metal crystal. A graph is given showing the work function of the rare earth elements and their hexaborides as a function of the number of electrons in the  $f$ -shell (see figure). Orig. art. has: 1 figure.



Number of electrons in the  $f$ -shell of an isolated metal atom

Relationship between the work function of rare earth elements and their borides, and the number of electrons in the  $f$ -shell

SUB CODE: 20/ SUBM DATE: 10Aug65/ ORIG REF: 005/ OTH REF: 001

Card 2/2

ACC NR: AR6035114

SOURCE CODE: UR/0147/66/000/008/I094/I094

AUTHOR: Shlyuko, V. Ya.

TITLE: Laboratory device for synthesizing high purity rare earth borides

SOURCE: Ref. zh. Metallurgiya, Abs. 8I649

REF SOURCE: Vestn. Kiyevsk. politekhn. in-ta. Ser. mekhan. -tekhnol., no. 2, 1966, 74-77

TOPIC TAGS: boride, rare earth, rare earth boride, laboratory apparatus

ABSTRACT: A laboratory unit has been developed for synthesizing high-purity rare earth borides. The device consists of a vacuum working chamber in which the charge in boronized molybdenum crucibles is placed on a turntable. The charge consists of a mixture of metal oxide and boron oxides in tablet form. The heating is provided by an electron gun with a lanthanum hexaboride cathode. The gun is fed by a smoothly controlled voltage of 5--20kv. The system is evacuated by two N5 and TsVL-100 diffusion pumps, a BNZ-booster pump and a VN-2MG rough exhaust pump. Individual evacuation of the chamber and the cathode unit insures a

Card 1/2

UDC: 620.181.1:621.365

ACC NR: AR6035114

stable operation of the electron gun. The temperature is measured by an OMP-19 optical micropyrometer through an observation port. The apparatus provides a wide range temperature variation necessary for synthesizing borides and eliminates the possibility of formation of a carbide component in the boride obtained. V. Sinev. [Translation of abstract] [AM]

SUB CODE: 13/

Card 2/2

08055-67 EWP(g)/EMT(m)/EMP(t)/ETI IJP(c) JD/JG

ACC NR: AP603229' (A) SOURCE CODE: UR/0226/66/000/009/0043/0049

AUTHOR: Bondarenko, V. P. ; Bilyk, I. I. ; Shlyuko, V. Ya.

ORG: Kiev Order of Lenin Polytechnic Institute (Kiyevskiy ordena Lenina politekhnicheskij institut)

TITLE: Investigation of conditions of alloy preparation in the system yttrium boride—lanthanum boride

SOURCE: Poroshkovaya metallurgiya, no. 9, 1966, 43-49

TOPIC TAGS: boron, solid solution, crystallization, alloy, yttrium, lanthanum, yttrium boride, lanthanum boride, hexaboride

ABSTRACT: A study has been made to investigate the effect of temperature and duration of sintering on the process of alloy preparation in the  $YB_6$ — $LaB_6$  system during combined reduction of oxides by boron in vacuum. It was found that the preparation of homogeneous solid solutions of hexaborides is possible with the presence in the charge of the appropriate metal instead of one of the oxides of hexaboride. It is suggested that the main accelerating factor is the formation of a

Card 1/2

L 08055-67

ACC NR: AP6032297

close contact between the hexaboride particles owing to their combined crystallization. Orig. art. has: 5 figures and 7 formulas. [Based on authors' abstract]

SUB CODE: 11/ SUBM DATE: 25May65/ ORIG REF: 006/ OTH REF: 002/

Card 2/2 *pla*

SHLYUKOVA, Z.V.; SOKOLOVA, M.N.; YAKOVLEVSKAYA, T.A.; RUDNITSKAYA, Ye.S.;  
BUROVA, T.A.

Labuntsovite from the Khibiny Mountains. Zap. Vses. min.  
ob-va. 94 no.4:430-436 '65. (MIRA 18:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralogii i geokhimii AN SSSR, Moskva.

SHLYUGER, V.I.

137-58-5-10863

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 281 (USSR)

AUTHORS: Chertavskikh, A.K., Kalinin, K.P., Shlyuger, V.I.

TITLE: Effect of Treatment Procedure on the Distribution of Lead in LS63-3 Brass (Vliyaniye tekhnologii obrabotki na raspredeleniye svintsa v latuni LS63-3)

PERIODICAL: Tr. Gos. n.-i. i proyekt. in-ta po obrabotke tsvetn. met., 1957, Nr 17, pp 69-78

ABSTRACT: With the object of improving the machinability of LS63-3 strip and sheet used in the watch industry, a procedure was sought for the manufacture of brass that would assure dispersion (D) and uniform distribution (UD) of the Pb. It is established that elevated D and UD of Pb are provided by a 17 mm/sec rate of casting with a 3:100 ratio of cross sections of stream to ingot, and intensive cooling of the mold. The temperature of the melt is 1000-1060°C. Additions of 0.5% Ce, Se, and Te do not affect the D and the nature of the UD of Pb. The maximum D of the Pb and consequently the best machinability and improved surface finish are obtained at maximum total degree of deformation and low temperature anneal (450-500°) for 2.5-3 hours.

Card 1/2

137-58-5-10863

Effect of Treatment Procedure (cont.)

The principal difference between the new and the old process is that annealing temperature has been cut by 150-200°.

N. L.

1. Brass-lead alloys--Properties 2. Lead--Distribution

Card 2/2



ACCESSION NR: AP4040473

S/0226/64/000/003/0091/0094

AUTHOR: Shlyuko, V. Ya.

TITLE: A laboratory electron beam furnace for vacuum melting and processing sintered refractory materials

SOURCE: Poroshkovaya metallurgiya, no. 3,(21), 1964, 91-94

TOPIC TAGS: electron beam, electron beam furnace, refractory metal, metal melting, metal film, film deposition, vacuum vapor deposition, refractory compound

ABSTRACT: A laboratory size electron beam furnace is described. It consists of a vacuum melting chamber, electron gun, high voltage rectifier, and vacuum system. The unit was successfully used in melting small amounts (18—25 g) of refractory metals, heat treating refractory carbides, and depositing diffusion coatings; the range of temperatures was great enough to permit vacuum vapor deposition of tungsten, molybdenum, niobium, tantalum, zirconium, and titanium films. Orig. art. has: 4 figures.

Card 1/2

ACCESSION NR: AP4040473

ASSOCIATION: Kiyevskiy ordena Lenina politekhnicheskij institut  
(Kiev Polytechnical Institute)

SUBMITTED: 16Apr63

DATE ACQ: 06Jul64

ENCL: 00

SUB CODE: EC,MM

NO REF SOV: 003

OTHER: 001

Card 2/2

SHLYUKO, V.Ya.; DERKACH, V.D.

Unit for crucibleless zone refining of high-melting metals by  
an electron beam in a vacuum. Zav. lab. 31 no.11:1408-1410 '65.  
(MIRA 19:1)

1. Kiyevskiy politekhnicheskii institut.

Shilov, I. ...

Graphical and analytical method of tolerance computation in measuring instruments.  
Moskva, Gos. izd-vo obor. promyshl., 1950. 129 p. (51-21787)

TJ1313.35

SHLYUKOV, P. N.

Technology

Graphoanalytical method of computing the requirement for polishing-machine cylinders and industrial diamonds, Moskva, 1951

9. MONTHLY LIST OF RUSSIAN ACCESSIONS, Library of Congress, December 1952. Uncl.

SHLYUKOV, P. N.

Diamonds, Industrial

"Graph-analytical method of calculating requirements as to polishing wheels and industrial diamonds." P. N. Shlyukov. Reviewed by A.A. Gratvol. Sel'khoz mashina, No. 7, 1952.

Monthly List of Russian Accessions, Library of Congress October 1952 UNCLASSIFIED

SHLYUKOV, V.A., inzhener.

Coremaking with powderlike sulfite liquor residue. Lit.proizv.  
no.5:27 My '56. (MLRA 9:8)  
(Coremaking)

SHLYUKOVA, Z.V.; BUROVA, T.A.

Chevkinite from the Khibiny Mountains. Zap. Vses. min. ob-va  
92 no.5:597-599 '63. (MIRA 17:1)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralogii i geokhimii (IGEM) AN SSSR, Moskva.



SHLYUS, Ye.N., polkovnik meditsinskoy sluzhby

Hypertension developing in athletes as a result of poorly organized  
training. Voen.-med. zhur. no.9:26-28 S '55. (MLRA 9:9)

(HYPERTENSION)

(ATHLETES--DISEASES AND HYGIENE)

SHLYUS, Ye.N. (Kronshtadt)

Influence of exercise therapy following appendectomy and herniotomy  
on the restoration of the vital capacity of the lungs and on the  
competence of the prelum abdominale. Vop. kur. fizioter. i lech.  
fiz. kul't. 25 no. 3:252-254 My-Je '60. (MIRA 14:4)  
(EXERCISE THERAPY) (APPENDECTOMY) (HERNIA) (LUNGS)  
(ABDOMEN)

YEGOROV, Yu.P.; KAPLAN, Ye.P.; LETINA, Z.I.; SHLYZPOCHNIKOV, V.A.;  
PETROV, A.D.

Order of addition of lithium to diphenyl. Zhur.ob.khim. 28 no.12:  
3258-3262 D '58. (MIRA 12:2)

1. Institut organicheskoy khimii AN SSSR.  
(Lithium) (Biphenyl)

SHVACHIN, I. A. -- "METHODS OF INCREASING THE EFFECTIVENESS OF THE OPERATIONS OF JIGGING MACHINES." 1953-54 JUN 52, MOSCOW MINING INST IMENI I. V. STALIN (DISSERTATION FOR THE DEGREE OF CANDIDATE IN TECHNICAL SCIENCES)

DD: VLICHERNAYA MORDVA, JANUARY-DECEMBER 1952

SHMACHKOV, N.A.

Mechanization of the process of taking coal samples. Koks i khim.  
no.6:7-10 '60. (MIRA 13:7)

1. Khar'kovskiy gornyy institut.  
(Coal)

+

SEMACHKOV, N. A., dotsent

Results of gravity coal preparation from the normal distribution parameters of a random quantity. *Izv. vys. ucheb. zav.; gor. zhur.* 5 no.8:176-181 '62. (MIRA 15:10)

1. Khar'kovskiy gornyy institut. Rekomendovana kafedroy obogashcheniya poleznykh iskopayemykh.

(Coal preparation)

SHMACHKOV, N.A.

Centrifugal mixer. Cor. zhur. no. 7:76 J1 '63.  
(MIRA 16:8)

SHMACHKOV, V., shofer; SOKOLOV, A.; PONIKAROV, A., shofer pervogo klassa

Striving for traffic safety should be a constant concern. Za  
bezop.dvizh. 3 no.9:11 S '60. (MIRA 13:9)

1. Vtoraya avtobaza legkovykh avtomobiley (for Shmachkov). 2.  
Predsedatel' Soveta obshchestvennykh inspektorov avtokombinata  
No.1 Glavmosavtotransa (for Sokolov). 3. 7-y taksomotornyy park  
(for Ponikarov).

(Traffic safety)



L 05769- EWT(m)/TWP(11/FT) LJP(11) JD

ACC NR:	ARG031877	SOURCE CODE:	UR/0058/66/000/006/E049/E049
AUTHOR:	Shmaevs'kyi, V. <span style="float: right;">39</span>		
TITLE:	Investigation of <u>ordering</u> the <u>solid solution</u> of <u>zinc cadmium antimonide</u> <span style="float: right;">B</span>		
SOURCE:	Ref. zh. Fizika, Abs. 6E380 <span style="float: right;">16 27 27 27</span>		
REF SOURCE:	Visnyk <u>L'vivs'k. un-tu</u> . Ser. fiz., no. 2, 1965, 89-90		
TOPIC TAGS:	zinc, cadmium, antimonide, solid solution, electric resistance, thermoelectromotive force		
ABSTRACT:	A relationship of widths of two x-ray diffraction lines has been measured on the Debye diagrams of the solid solution of ZnSb—CdSb, close to ZnCdSb <sub>2</sub> . The discovered line widening is caused by the appearance of second-order voltages, apparently connected with the partial ordering of the solid solution, which is confirmed by anomalies on the curves of the dependence of electrical resistance and thermoelectromotive force on the temperature at 510—540K. Ye. Vlasova. [Translation of abstract]		
SUB CODE:	11/		

Card: 1/1 *eqz*

TSERMAN, M.D.; SHMAGAYLO, Ye.D.

Increasing limekiln capacity. Sakh. prom. 31 no.1:61-62 Ja '57.  
(MIRA 10:4)

1. Sakharnyy zavod "Kreshchatik".  
(Limekilns)

TSERMAN, N.D.; SHAGAYLO, Ye.D.

Regularize the operation of sugar refinery lime sections. Sakh.prom.  
31 no.7:24-26 J1 '57. (KURA 10:8)

1. Sakharnyy zavod "Kreshchatik."  
(Sugar industry--Equipment and supplies)

GRAFNETTEROVA, Y. [Grafnetterova, J.]; KHOLINSKI, K. [Holinsky, K.];  
SHMAGEL, O. [Smagel, O.]; SHIK, O. [Sik, O.]

Significance of plasma clearance in the study of the kinetics of  
antibiotics. Antibiotiki 5 no.3:56-60 My-Je '60. (MIRA 14:6)

1. Kafedra vnutrennikh bolezney (zav. - O.Shmagel) Instituta  
usovershenstvovaniya vrachey, Praga, Chekhoslavakiya.  
(ANTIBIOTICS)

ACCESSION NR: AP4003198

S/0241/63/008/012/0047/0050

AUTHOR: Kharvat, Z.; Shmagel', Yu.

TITLE: Investigation of vessel regeneration in skin wounds as an objective method for determining changes in the healing process following x-irradiation

SOURCE: Meditsinskaya radiologiya, v. 8, no. 12, 1963, 47-50 (including insert facing p. 49)

TOPIC TAGS: skin wound, vessel regeneration, wound healing, postirradiation healing, skin wound healing, blood vessel regeneration

ABSTRACT: An earlier study has established that vessel regeneration in skin wounds of nonirradiated rats passes through a series of three qualitatively different stages. The authors recommend that these stages be used as an objective criterion in evaluating skin wound regenerative processes in irradiated animals. To determine the regenerative stage of vessels in a wound, rats are first anesthetized and the thoracic cavity is opened. Then the left ventricle of the heart is punctured to introduce a heated (50°C) mixture (30-50 ml) of gelatin, ink, and a few other substances through a fixed syringe

Card 1/2

ACCESSION NR: AP4003198

in the ascending artery. The animal is placed in cold water to cool the mixture in the vessels. Then a square skin flap is cut with the wound in the center. The skin is separated from the base of the wound and both are fixated in Carnoy solution and then placed in glycerine. With a stereoscopic microscope the vessel regeneration stage is determined in the skin preparations. Orig. art. has: 5 figures.

ASSOCIATION: Kafedra gistologii i embriologii meditsinskogo fakul'teta Karlova universiteta v gradtse Kralove (Histology and Embryology Department of the Medical Division of Charles University)

SUBMITTED: 04Jul63

DATE ACQ: 09Jan64

ENCL: 00

SUB CODE: AM

NO REF SOV: 000

OTHER: 001

Card  
2/2

SHIDLOVSKIY, A.A.; SHMAGIN, L.F.

Thermal decomposition and combustion of ammonium perchlorate.

Izv.vys.uch.zav.; khim.i khim.tekh. 5 no.4:529-532 '62.

(MIRA 15:12)

1. Moskovskiy institut khimicheskogo mashinostroyeniya,  
kafedra obshchey i organicheskoy khimii.

(Ammonium perchlorate)

(Combustion)

11-2110

S/080/62/035/004/004/022  
D204/D301

AUTHORS: Shidlovskiy, A. A., Semishin, V. I. and Shmagin, L. F.

TITLE: Thermal decomposition and combustion of hydrazine perchlorate

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 4, 1962, 756-759

TEXT: The above was studied as an extension of the authors' earlier work on  $\text{NH}_4^+$  and  $\text{N}_2\text{H}_4$  salts. Thermochemical and physico-chemical properties of hydrazine perchlorate were investigated and the preparation and analysis (iodometric) are described in brief. The density was found to be  $1.927 \text{ g/cm}^3$ , heat of solution at  $298^\circ\text{K}$   $9.77 \text{ kcal/mole}$  for 1:1000 dilution, heat of formation  $42.9 \text{ kcal/mole}$  and m.p.  $140.5 - 141.0^\circ\text{C}$ . Sensitivity to impact and friction was high (greater than  $\text{NH}_4\text{ClO}_4$ ). Thermal decomposition was studied by heating the samples for 6 minutes at set temperatures, between  $160^\circ\text{C}$  (no decomposition) and  $240^\circ\text{C}$  (5.4% loss in weight). Fast

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Thermal decomposition and ...

S/080/62/035/004/004/022  
D204/D301

ASSOCIATION: Moskovskiy institut khimicheskogo mashinostroyeniya  
(Moscow Institute of Chemical Machine Construction)

SUBMITTED: October 24, 1960

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L 21825-65 EPA/EPF(c)/EPF(n)-2/EPR/EPA(s)-2/ENT(m)/EMP(b)/EMP(t) pr-4/pt-10/  
 pu-4/paa-4 SSD(a)/IJP(c) WW/JWD/JD  
 ACCESSION NR: AP5001756 S/0153/64/007/005/0862/0863

AUTHOR: Shidlovskiy, A. A.; Shmagin, L. F.; Bulanova, V. V.

TITLE: Burning of ammonium perchlorate under atmospheric pressure

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 7, no. 5, 1964, 862-863

TOPIC TAGS: ammonium perchlorate, catalyst, ammonium perchlorate decomposition, ammonium perchlorate burning

ABSTRACT: The catalytic effect of  $\text{Cu}_2\text{O}$ ,  $\text{Cu}_2\text{Cl}_2$ ,  $\text{CuO}$ ,  $\text{CuCO}_3$ ,  $\text{MnO}_2$ ,  $\text{MnCO}_3$ ,  $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ ,  $\text{Co}_2\text{O}_3$ ,  $\text{ZnO}$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{NiO}$ ,  $\text{Ni}_2\text{O}_3$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Cu}$ ,  $\text{Cr}_2\text{O}_4$ ,  $\text{CdO}$ , or  $\text{MgO}$  on the thermal decomposition and burning of ammonium perchlorate has been studied at atmospheric pressure. The experiments were conducted with technical-grade  $\text{NH}_4\text{ClO}_4$  sifted through a no. 61 sieve and containing 5% of the ground pure catalysts. The mixtures were burned at 20 and 100C in glass tubes. At 20C,  $\text{NH}_4\text{ClO}_4$  burns in the presence of  $\text{Cu}_2\text{O}$ ,  $\text{CuO}$ ,  $\text{Cu}_2\text{Cl}_2$ ,  $\text{MnO}_2$ , or  $\text{MnCO}_3$ , and at 100C

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ACCESSION NR: AP5001756

in the presence of  $\text{CuCO}_3$ ,  $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ ,  $\text{Co}_2\text{O}_3$  or  $\text{ZnO}$ . The highest burning velocity and highest thermal coefficient of the burning velocity (0.60—0.80 mm/sec at 20C and 1.40—2.08 mm/sec at 100C) are exhibited by mixtures containing copper compounds. Mixtures with  $\text{Fe}_2\text{O}_3$ ,  $\text{NiO}$ ,  $\text{Ni}_2\text{O}_3$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Cu}$ ,  $\text{Cr}_2\text{O}_4$ ,  $\text{CdO}$  as  $\text{MgO}$  do not burn under the above conditions. Orig. art. has: 1 table.

ASSOCIATION: Moskovskiy institut khimicheskogo mashinostroyeniya  
(Moscow Institute of Chemical Machinery)

SUBMITTED: 03Apr64

ENCL: 00

SUB CODE: CC, FP

NO REF SOV: 009

OTHER: 004

ATD PRESS: 3166

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L 3687-66 EWT(m)/EPF(c)/EPF(n)-2/T/EWP(t)/EWP(b) IJP(c)/RPL JD/WW/JW/HW/JWD  
ACC NR: AP5026424 SOURCE CODE: UR/0153/65/008/004/0533/0538

AUTHOR: Shidlovskiy, A. A.; Shmagin, L. F.; Bulanova, V. V.

ORG: Moscow Institute of Chemical Machine Building, Chair of General and Organic Chemistry (Moskovskiy institut khimicheskogo mashinostroyeniya, Kafedra obshchey i organicheskoy khimii)

TITLE: The effect of some additives on the thermal decomposition of ammonium perchlorate

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 8, no. 4, 1965, 533-538

TOPIC TAGS: solid propellant, oxidizer, ammonium salt

ABSTRACT: The purpose of this work was to investigate the thermal decomposition of ammonium perchlorate (AP) in the presence of oxides, chlorides, carbonates, and oxalates of certain metals. The decomposition was studied gravimetrically, at atmospheric pressure and 214—470C. The following values for activation energies were found: for the orthorhombic form,  $E = 40$  kcal/mole; for the cubic form,  $E = 24—28$  kcal/mole; for the residue from the low-temperature decomposition,  $E = 36—39$  kcal/mole. Compounds of manganese and cobalt promote complete decomposition of AP at  $T < 240C$ . Compounds of iron, nickel, and chromium promote complete decomposition of AP at 270—280C. The rate of decomposition of AP is increased by the addition of compounds of copper, manganese, cobalt, as well as zinc oxide; it is retarded by the addition of compounds of iron,

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ACC NR: AP5026424

bivalent nickel, chromium, and vanadium pentoxide. For the same element, the activity of the compounds added decreases in the following order: Carbonate (oxalate), oxide, chloride. Orig. art. has: 3 tables and 3 figures. [VS]

SUB CODE: FP / SUBM DATE: 13May64/ ORIG REF: 006/ OTH REF: 007/ ATD PRESS: 4/20

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Card 2/2

L 05022-67 FWT(m)/EWP(j) WW/JW/JWD/RM

ACC NR: AR5032310

SOURCE CODE: UR/0081/66/000/010/V172/V173

AUTHOR: Shmagin, L. F.; Shidlovskiy, A. A.

TITLE: The effect of the oxides of some metals on the composition of the products of thermal decomposition of ammonium perchlorate ||<sup>2</sup>

SOURCE: Ref. zh. Khimiya, Part I, Abs. 10V148

REF SOURCE: Sb. Issled. v obl. khimii i tekhnol. mineral'n. soley i okislov. M. -L., Nauka, 1965, 112-114

TOPIC TAGS: thermal decomposition, perchlorate, ammonium perchlorate

ABSTRACT: A study was made of the composition of gases emitted during the thermal decomposition of pure  $\text{NH}_4\text{ClO}_4$ . During the decomposition at a temperature 240C,  $\text{Cl}_2$  is liberated mainly in free form. As the temperature increases, the amount of free  $\text{Cl}_2$  decreases and the amount of  $\text{HCl}$  increases. When the decomposition occurs in the presence of  $\text{Cr}_2\text{O}_3$ ,  $\text{MnO}_2$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{Co}_2\text{O}_3$ ,  $\text{NiO}$  and  $\text{Cu}_2\text{O}$ , the ratio between the amount of  $\text{Cl}_2$  emitted in free form and in the form

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L 05022-67

ACC NR: AR6032310

of HCl depends somewhat on the chemical nature of the added oxide. An exception is ZnO, in whose presence the amount of the HCl formed sharply decreases. During the decomposition of the pure  $\text{NH}_4\text{ClO}_4$  a significant amount of  $\text{N}_2\text{O}$  is formed. In the presence of metal oxides, the amount of  $\text{N}_2\text{O}$  decreases (except in a series of experiments with ZnO). Very little  $\text{N}_2\text{O}$  is formed in the presence of  $\text{MnO}_2$  and  $\text{Co}_2\text{O}_3$ , which accelerate the thermal decomposition at a greater rate than the other additives. A large part of the nitrogen is liberated in the form of NO with  $\text{MnO}_2$  and  $\text{Co}_2\text{O}_3$  additions. [Translation of abstract]

SUB CODE: 07/

Card 2/2 *LC*

GUREVICH, B.Ye.; ~~MEMIROVSKIY~~, A.N.; YEFIMOV, V.A.; ~~SHMAGIN~~, Ya.G.;  
Prinimali uchastiye: Semenov, S.S., kand.tekhn.nauk; NIKOLAYEVA,  
A.I., tekhnik

Production of oil shale diesel fuel. Khim. i tekhn. gor. slan.  
i prod. ikh perer. no.8:84-T01 '60. (MIRA 15:2)  
(Diesel fuels)  
(Oil shales)



SHMAGIN, Ya.G.; SIPOVSKIY, G.V.; KOTKAS, R.E.

Water extraction of diatomic phenols from distillate fractions of  
shale tars. Khim. i tekhn. gor. slan. i prod. ikh perer. no.11:  
236-245 '62. (MIRA 17:3)

FEOFILOV, Ye.Ye.; SOO, K.M.; SIPOVSKIY, G.V.; SHMAGIN, Ya.G.

Operation of a phenol separation tar-refining unit of the V.I. Lenin  
Shale Processing Combine. Khim. i tekhn. gor. slan. i prod. ikh perer.  
no. 11: 246-258 '62. (MIRA 17:3)

SIFOVSKIY, G.V.; FEOFILOV, Ye.Ye.; KHALLIK, E.K. [Hallik, E.];  
KAL'BERG, A.O. [Kalberg, A.]; SHMAGIN, Ya.G.

Distillation of chamber tar in an experimental atmospheric  
and vacuum distillation unit. Khim. i tekhn. gor. slan.  
i prod. ikh perer. no.10:190-199 '62. (MIRA 17:5)

FEOFILOV, Ye.Ye.; SIPOVSKIY, G.V.; SHMAGIN, Ya.G.; MATOCHINSKIY, Yu.M.

Continuous distillation of oil shale tars under atmospheric pressure. Khim. i tekhn. gor. slan. i prod. ikh perer.  
no.10:200-216 '62.